



Electronic Filing System (EFS) Data
Electronic Patent Application Submission
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EFS ID: 57194
Application ID: 10686486
Title of Invention: APPARATUS FOR ELECTRO
CHEMICAL DEPOSITION OF
COPPER METALLIZATION WITH
THE CAPABILITY OF IN-SITU
THERMAL ANNEALING
First Named Inventor: ROBIN CHEUNG
Domestic/Foreign Application: Domestic Application
Filing Date: 2003-10-15
Effective Receipt Date: 2004-03-16
Submission Type: Information Disclosure
Statement
Filing Type:
Confirmation number: 8014
Attorney Docket Number: AMAT3421C2
Total Fees Authorized: 180.0
Payment Category: Deposit Account
Deposit Account Number: 200782
Deposit Account Name: N. ALEXANDER NOLTE
Access Code: ****
RAM Payment Status: RAM success
RAM User ID: EFSPROD
RAM Accounting Date: 2004-03-16
RAM Sequence Number: 15




Digital Certificate Holder: cn=N. Alexander Nolte,ou=Registered Attorneys,ou=Patent and
Trademark Office,ou=Department of Commerce,o=U.S. Government,c=US
Certificate Message Digest: 7667294b32627bf3f3c3de612810de5f6e7f4163



TRANSMITTAL

Electronic Version v1.1

Stylesheet Version v1.1.0

Title of Invention	APPARATUS FOR ELECTRO CHEMICAL DEPOSITION OF COPPER METALLIZATION WITH THE CAPABILITY OF IN-SITU THERMAL ANNEALING															
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Date: 2003-10-15																
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<p>I hereby certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.</p> <p>I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.</p>																
<table border="1"><thead><tr><th>Submitted by:</th><th>Elec. Sign.</th><th>Sign. Capacity</th></tr></thead><tbody><tr><td>Mr. N. ALEXANDER NOLTE Registered Number: 45689</td><td>[N. ALEXANDER NOLTE]</td><td>Attorney</td></tr></tbody></table>			Submitted by:	Elec. Sign.	Sign. Capacity	Mr. N. ALEXANDER NOLTE Registered Number: 45689	[N. ALEXANDER NOLTE]	Attorney								
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<table><tr><td>Documents being submitted</td><td>Files</td></tr><tr><td>us-fee-sheet</td><td>AMAT3421C2NAN-usfees.xml</td></tr><tr><td></td><td>us-fee-sheet.xsl</td></tr><tr><td></td><td>us-fee-sheet.dtd</td></tr><tr><td>us-ids</td><td>AMAT3421C2NAN-usidst.xml</td></tr><tr><td></td><td>us-ids.dtd</td></tr><tr><td></td><td>us-ids.xsl</td></tr></table>			Documents being submitted	Files	us-fee-sheet	AMAT3421C2NAN-usfees.xml		us-fee-sheet.xsl		us-fee-sheet.dtd	us-ids	AMAT3421C2NAN-usidst.xml		us-ids.dtd		us-ids.xsl
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	us-ids.xsl															




Comments

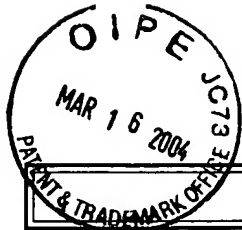
NO FEE REQUIRED - FILED IDS BEFORE FIRST OA

**FEE TRANSMITTAL**

Electronic Version v08

Stylesheet Version v08.0

Title of Invention	APPARATUS FOR ELECTRO CHEMICAL DEPOSITION OF COPPER METALLIZATION WITH THE CAPABILITY OF IN-SITU THERMAL ANNEALING										
Application Number: 10/686486 											
Date: 2003-10-15											
First Named Applicant: ROBIN CHEUNG											
Attorney Docket Number: AMAT3421C2											
Art Unit: 1753											
TOTAL FEE AUTHORIZED \$180											
Patent fees are subject to annual revisions on or about October 1st of each year.											
BASIC FILING FEE											
<table border="1"><thead><tr><th>Fee Description</th><th>Fee Code</th><th>Amount \$</th><th>Fee Paid \$</th></tr></thead><tbody><tr><td>Submission Of Information Disclosure Stmt Fee</td><td>1806</td><td>180</td><td>180</td></tr></tbody></table>				Fee Description	Fee Code	Amount \$	Fee Paid \$	Submission Of Information Disclosure Stmt Fee	1806	180	180
Fee Description	Fee Code	Amount \$	Fee Paid \$								
Submission Of Information Disclosure Stmt Fee	1806	180	180								
AUTHORIZED BILLING INFORMATION											
The commissioner is hereby authorized to charge indicated fees and credit any overpayments to:											
Deposit account number: 200782											
Access Code ****											
Deposit name: Moser Patterson Sheridan											
Deposit authorized name: N. ALEXANDER NOLTE											
Signature: \N. ALEXANDER NOLTE\											
Date (YYYYMMDD): 2004-03-16											

**FEE TRANSMITTAL**

Electronic Version v08

Stylesheet Version v08.0

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ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of
Invention

APPARATUS FOR ELECTRO CHEMICAL DEPOSITION OF
COPPER METALLIZATION WITH THE CAPABILITY OF IN-
SITU THERMAL ANNEALING

Application Number: 10/686486



Confirmation Number: 8014

First Named Applicant: ROBIN CHEUNG

Attorney Docket Number: AMAT3421C2

Art Unit: 1753

Search string: (3649509 or 3727620 or 3770598 or 4027686
or 4092176 or 4110176 or 4113492 or 4315059
or 4326940 or 4336114 or 4376685 or 4405416
or 4428815 or 4435266 or 4489740 or 4510176
or 4518678 or 4519846 or 4568431 or 4693805
or 4732785 or 4789445 or 4816098 or 4816638
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or 5100516 or 5155336 or 5162260 or 5222310
or 5224504 or 5230743 or 20010030101 or
20020000271 or 20020022363 or 20020029961
or 20020037641 or 20020074233).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	3649509	1972-03-14	MORAWETZ, ET AL.			
	2	3727620	1973-04-17	ORR			
	3	3770598	1973-11-06	CREUTZ			
	4	4027686	1977-06-07	SHORTES, ET AL.			
	5	4092176	1978-05-30	KOZAI, ET AL.			
	6	4110176	1978-08-29	CREUTZ, ET AL. (DECEASED)			
	7	4113492	1978-09-12	SATO, ET AL.			
	8	4315059	1982-02-09	RAISTRICK, ET AL.			
	9	4326940	1982-04-27	ECKLES, ET AL.			
	10	4336114	1982-06-22	MAYER, ET AL.			



11	4376685	1983-03-15	WATSON
12	4405416	1983-09-20	RAISTRICK, ET AL.
13	4428815	1984-01-31	POWELL, ET AL.
14	4435266	1984-03-06	JOHNSTON
15	4489740	1984-12-25	RATTAN, ET AL.
16	4510176	1985-04-09	CUTHBERT, ET AL.
17	4518678	1985-05-21	ALLEN
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19	4568431	1986-02-04	POLAN, ET AL.
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21	4732785	1988-09-15	QUAZI
22	4789445	1988-12-06	GOFFMAN, ET AL.
23	4816098	1989-03-28	DAVIS, ET AL.
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26	5055425	1991-10-08	LEIBOVITZ, ET AL.
27	5069760	1991-12-03	TSUKAMOTO, ET AL.
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33	5224504	1993-07-06	THOMPSON, ET AL.
34	5230743	1993-07-27	THOMPSON, ET AL.

US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
	1	20010030101	2001-10-18	BERNER, ET AL.			
	2	20020000271	2002-01-03	RITZDORF, ET AL.			
	3	20020022363	2002-02-21	RITZDORF, ET AL.			
	4	20020029961	2002-03-14	DORDI, ET AL.			
	5	20020037641	2002-03-28	RITZDORF, ET AL.			
	6	20020074233	2002-06-20	RITZDORF, ET AL.			



Signature

Examiner Name	Date